## REMARKS/ARGUMENTS

Claims 1-7 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (USPN 3,580,462) in view of Carlomagno (USPN 5,143,272). Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (USPN 3,580,462) and Carlomagno (USPN 5,143,272) as applied to claim 1 above and further in view of Matu (JP 52-42447). Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (USPN 3,580,462) and Carlomagno (USPN 5,143,272) as applied to claim 9 above and further in view of Matu (JP 52-42447). Applicants' respectfully traverse the rejections and request reconsideration.

Neither the patents cited in the outstanding Office Action, nor any other evidence of record, establishes a prima facie case of obviousness. It is incumbent upon the Examiner to prove a *prima facie* case of obviousness (MPEP 2143). To establish a *prima facie* case three basic criteria must be met. First, the prior art reference must teach or suggest all the claim limitations. Second, there must be a reasonable expectation of success. Finally, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference.

**TRAVERSE (i)**: There is no motivation or suggestion contained in the cited art to combine the teachings of the references.

Before obviousness may be established, the Office Action ***must show specifically*** the principle, known to one of ordinary skill that suggests the claimed combination. In re Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). In other words, the Examiner ***must explain*** the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention. Id. The factual question of motivation is material to

patentability and ***cannot be resolved based on subjective belief and unknown authority***. Id. at 1344. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577 (Fed. Cir. 1984). The critical inquiry is whether there is something in the prior art as a whole *to suggest* the desirability, and thus the obviousness, of making the combination. Fromson v. Advance Offset Plate, 755 F.2d 1549, 1556 (Fed. Cir. 1985). The *Office Action fails to show either a suggestion in the art or a compelling motivation based on sound scientific principles to combine the references and therefore the rejection under 35 U.S.C. § 103(a) is improper and should be withdrawn.* For example, there is no suggestion in the Reynolds reference to apply the vacuum suction of the Carlomagno reference to the circuit substrate of the Reynolds reference and vice versa, namely there is no suggestion in the Carlomagno reference to combine the desoldering device of Carlomagno with the solder wettable pad of the Reynolds reference.

Thus, Applicants respectfully submit that there is no motivation or suggestion to combine the references.

**TRAVERSE (ii)**: The combination does not provide Applicants' claimed invention.

"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989). MPEP § 2131. Contrary to Examiner's statement that all elements are disclosed in Reynolds, Carlomango, and Matu combination, Applicants' claimed elements including "providing a sacrificial circuit substrate with a plurality of pads, a portion of each pad having a solder-wettable material disposed thereon and wherein the plurality of pads are connected to *vias* comprising through-

holes that are plated with solder-wettable material" are not disclosed or taught in the cited references.

The Examiner has already admitted that the Reynolds reference does not teach the claimed vias. Office Action dated 18 January 2006, page 4. The Examiner attempts to utilize Carlomagno to fill this void. However, as stated in the attached declaration, Carlomagno is an ineffective reference in that utilizing the technology in Carlomagno may cause damage to the circuit substrate. Thus, one of ordinary skill in the art would not utilize the desoldering device in Carlomagno with the circuit substrate of Reynolds.

As suggested by the Examiner, Applicants herewith submit a 37 CFR § 1.132 Declaration of Robert Babula, an expert in the field of manufacturing technologies, showing that vacuum suction would not be utilized to perform removal of excess solder if damage to the circuit substrate is of concern, e.g. as in Reynolds. The facts are set forth in Mr. Babula's declaration establish that utilizing vacuum suction as described in the Carlomagno reference may damage to the circuit substrate while removing excess solder.

As required by 37 CFR 1.116(e), a showing of good and sufficient reasons why the declaration is necessary and why it was not earlier presented follows. The attached declaration is necessary because the previously submitted arguments and corresponding amendments have not been successful in convincing the examiner that Applicants' claimed invention is patentable over the cited art. Thus, to remove the Carlomagno reference, the attached declaration is required. Further, the attached declaration was not earlier presented because Applicants felt that the previously submitted arguments and corresponding amendments would distinguish the present invention from the cited art and would be persuasive. As such, Applicants felt that the attached declaration would not be necessary and did not submit it earlier.

Since Reynolds in combination with Carlomagno and/or Matu, independently or in combination, do not contain at least these features of the Applicants' Claims 1-14, these references do not make obvious Applicants' claims. As such, a rejection under 35 U.S.C. § 103 is improper and should be withdrawn.

Respectfully submitted,

SEND CORRESPONDENCE TO:

Motorola, Inc.
1303 East Algonquin Road
IL01/3rd Floor
Schaumburg, IL 60196
Customer Number: 22917

By: _____

Indira Saladi
Attorney of Record
Reg. No.: 45,759

Telephone: 847-576-6735
Fax No.: 847-576-0721

Attachments